

QUALITY CIRCLES :
A NEW EXPERIENCE FOR HONG KONG

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RESEARCH REPORT
Presented to
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In Partial Fulfilment
of the Requirements for the Degree of
MASTER OF BUSINESS ADMINISTRATION

THE LINGNAN INSTITUTE OF BUSINESS ADMINISTRATION
THE CHINESE UNIVERSITY OF HONG KONG

May 1982

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ABSTRACT

Lately, quality circles have attracted much attention in Hong Kong. However, while interest is high, knowledge is still scant. This research paper, through interviews, mailed questionnaires, and field observations, attempts to obtain information on the current state of development of the circle movement, local managers' opinions towards quality circles and the actual operation of circle programs. In brief, we are interested to know whether there is a future for quality circle development in Hong Kong, taking into consideration our unique social and cultural characteristics.

Results of the study show that the circle idea is attractive to many informed managers. However, because of certain constraints in the social, cultural and company environment, some people are skeptical about the applicability of quality circles in Hong Kong and they are especially worried about management support and workers' acceptance. Companies which started to run circle programs had various experiences and are all at a stage of trial and error. The development of the circle movement depends on whether there will be successful circle programs in the near future and how the circle idea will be promoted in the coming years. In short, quality circles have a chance to take root in Hong Kong but we should not be too optimistic about their development.

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CHAPTER I

INTRODUCTION

Quality Circles?

"Quality circles? What are they?"

This is a normal response when one talks about quality circles to people in Hong Kong, even those at the management level. It should not be a surprise because quality circles were formally introduced to Hong Kong less than a year ago. Since mid-1981, some associations organized a study mission to Japan and have conducted training courses and a conference on this topic. Despite the brief introductory period of the quality circle concept, it has already aroused a lot of interest as well as suspicion among those who have heard of it. A couple of manufacturing companies have started to implement it on a trial basis.

However, the quality circle idea is not a new concept. It has been widely practised in Japan for twenty years. A number of companies in the United States, United Kingdom, Scandinavia and some Asian countries have been developing similar quality circle programs for some years. General comments are that quality circles, though not a panacea, can significantly improve product quality, productivity and workers' morale in an organization.

Since the turn of the century, the United States and Western European countries had been the major economic

powers in the world. In the last two decades, however, we have witnessed the rapid penetration of Japanese products into world markets and her rising reputation on design and quality. Despite the complete devastation of its industrial capacity in World War II, Japan has now developed into a third economic giant alongside the United States and Western Europe, and even poses threats to the technological leadership and competitiveness of some of their major industries. This change has stimulated a lot of studies to uncover the secrets behind the Japanese success. Most attention has been paid to Japanese philosophy and practices on human resources management. Among others, quality circle activities have been singled out as one of the major factors contributing to the Japanese economic miracle in the postwar period.

At a time when the Japanese style of management is the hot topic of the business world, many people suspect that quality circles will just be another management fad. Nevertheless, the mounting reports on the achievement of quality circles in Japan and some other countries suggest that it is not an empty promise but may be a real breakthrough in our search for better quality and productivity. The problem is that there is also a high failure rate in the implementation and maintenance of quality circle programs, especially in countries other than Japan. Therefore, there are doubts whether the quality circle concept is culturally bound or universally applicable.

The same problem is faced by Hong Kong managers when they come across this quality circle concept. As we

shall see, the basic concept and techniques of quality circles are deceptively simple. They can be subject to different interpretations and emphasis, especially when we think of the cultural and social differences between Japan and Hong Kong. At present, there are about fourteen companies which have started some form of quality circle programs, and some more are preparing to follow. If we try to look into their philosophies, objectives and ways of implementation, we can find that no two are similar. No doubt, people are anxious to know what can be achieved by these pioneers and what ways of implementation will be adequate in Hong Kong.

Yet, there is a more basic question to be asked: "What is the feasibility of implementing quality circles in Hong Kong?" To state it clearly, we have to know at least three things. Do quality circles have real power? Can their contribution justify the cost and effort to be paid and be comparable to other management techniques of similar functions? And most important, can they be accepted and successfully implemented in Hong Kong, with regard to our prevailing cultural, social and economic environment?

Purpose of the Study

When a manager comes across the concept of quality circle, he will certainly ask five questions:

- (1) What is a quality circle?
- (2) What can it do for me and how can it achieve the alleged functions?
- (3) Can it be trusted and accepted by people in

Hong Kong?

(4) How can it be implemented? What are the experiences of other people?

(5) Does my organization need it and is able to implement it?

Regrettably, at the moment he will have a lot of troubles in finding answers to all these questions. On one hand, objective and systematic studies on quality circles are limited and practically unavailable in Hong Kong. What we do have are mainly promotional articles, consultants' handbooks and a few simple commentaries. While these materials can also provide valuable information, it requires a lot of effort to collect, digest and synthesize them, which most managers cannot afford or are unwilling to do so. On the other hand, the history of quality circle activities in Hong Kong is so short that very few people have knowledge and experience about them. There is also no easy access to the opinion and experience of these people. Extensive studies in this field do not exist.

Since more and more people have encountered and showed interest in quality circles, it should be worthwhile for us to make a search into the preliminary experience of the pioneers and the general response of people who know the concept. While there are a lot of objective limitations, this research is expected to provide some insights into the questions mentioned in the above. It is also hoped that information gathered in this paper will provide a base for further study in the future.

In the chapters that follow, we shall first introduce the research methods adopted in this paper. A detailed analysis of the history and philosophy of quality circles will also be done so as to provide a framework for us to evaluate the local attitudes and practices.

After the collection of data, we should have some information about the state of development of quality circles in Hong Kong, people's perception of the idea, and methods of implementation practised by pioneering companies. Based on the information and circle experiences of Japan and other countries, we shall try to make a preliminary examination on the feasibility of applying quality circles in Hong Kong, as well as the possible trend of development in the coming few years.

CHAPTER II

RESEARCH METHODS

The Research Problem

In this research, we want to find out the present state of development of quality circles in Hong Kong and its long term feasibility. Specific points we will try to look at are:

- (1) How was the quality circle concept introduced to Hong Kong?
- (2) How much do the people know about the concept?
- (3) How do they view the idea?
- (4) Do they think that quality circles can be implemented in Hong Kong? What will be the contributing factors and obstacles?
- (5) Do they intend to introduce quality circles in their company?
- (6) For those companies which have already run quality circles, how did they start the program and what are their experiences to date?
- (7) What kind of promotion and training on quality circles is desired?

Limitations of the Research

In designing the research, we notice that there are certain limitations we have to cope with:

- (1) The quality circle is a new concept in Hong

Kong. Very few people have heard of it and most of them are personnel, quality control or manufacturing managers. The concept is still unknown to the majority of the workforce, except a few who work in companies having started some circle programs.

(2) It is very hard to identify the people who have a knowledge of quality circles. The most definite ones are the participants in the conference, seminars and the study mission on quality circles and personnel in charge of, or involved in, circle programs of practising companies.

(3) At the time of this research, few companies have run quality circles for more than nine months. Most practising companies are still in the first quarter of the pilot program or at a training stage. It is not yet the time to evaluate their performance or to arrive at any definite conclusion about their success or failure.

(4) Since a quality circle requires a long time for training and building up members' confidence, it cannot assume its normal function in the first three to six months. Therefore, workers' and supervisors' feeling obtained in the early stage of a circle program may be somewhat biased and incomplete, though they can provide some useful insights.

(5) The authors have had no chance to observe how circles are run in Japan or other countries. They have had to rely on the limited literature and case reports. This makes comparison and evaluation more difficult.

In view of the above limitations, it was decided

that the research would solicit opinions mainly from managers who have participated in certain conferences or the study mission on quality circles or are in charge of the circle programs in their companies. This should not affect the validity of the research because of the fact that in the implementation of any new management program such as quality circles, it is usually the knowledge and attitude of management that is critical. As long as the program is not detrimental to their interests, workers are always ready to be persuaded to give their support. The experience of other countries in implementing quality circles strongly supports this viewpoint. Nevertheless, a few interviews with circle members and observation of circle meetings will also be done to crosscheck the statement of management.

Research Design and Data Collection

Essentially the present research is an exploratory study. The purpose is to gain familiarity with the quality circle concept and to obtain insights into the feasibility of applying circle programs in Hong Kong. Therefore, flexibility is the key feature of our research design.

The research is mainly based on a literature review and an experience survey. In the literature review, focus has been put on books, articles, manuals and case studies on quality circles as well as Western management theories, especially concerning motivation and group dynamics. The objective is to find out the theory and practice of quality circles in Japan and other countries.

This information will form the framework of analysis for the results of the experience survey. In the experience survey, questionnaires, interviews and observations are used to collect people's opinions and experiences with quality circles.

A large part of the respondents selected for the survey were participants in the conference, study mission and seminars on quality circles. While several activities of this kind have been held so far, there was a large percentage of duplications among their participants. Therefore, it was decided to compile a list of targeted respondents based on participants of two major events: the Quality Control Circle Study Mission to Japan organized by the Hong Kong Productivity Centre in September 1981, and the Asia Quality Circles Conference hosted by Hong Kong Industrial Relations Association in November 1981. All overseas delegates and student participants were excluded. For those companies which had more than one delegate to these functions, one or two key persons were selected for contact.

However, there were persons who had not participated in the above events but were capable of providing valuable ideas on our problem. They were also identified and included in the list of targeted respondents. These people included coordinators and facilitators of some practising companies, management consultants, government officials and executives of industrial and training organizations.

The resultant list of targeted respondents con-

sists of three types of people. Different methods of data collection are used for each group.

The first group consists of people who have actual experience of running quality circles in Hong Kong. Until March 1982, there were about fourteen companies having some forms of circle programs. We selected six companies which have more extensive experience for in depth study and conducted telephone interviews with other eight companies. The six companies we visited are: Lam Soon (H.K.) Ltd., Raco Industrial Co. Ltd., Chen Hsong Machinery Co. Ltd., Data General (H.K.) Ltd.- Shui On Holding Ltd., and National Semiconductor (H.K.) Ltd.. All these companies have more than three months' experience with their circle programs. In each case, we visited the plant, conducted in-depth personal interviews with the coordinator, the facilitator of the circle program and sometimes the senior manager of the company, observed a circle meeting, and in some cases talked with circle leaders and members.

The second group consists of people who have participated in the above conference or study mission but do not have a circle program in their companies or have just started to plan the program and train up members. Telephone interviews based on an unstructured questionnaire were conducted. A total of thirty persons were contacted.

In addition to the above two groups of people, we have also conducted a few personal interviews with the following:

(1) A senior consultant of the Hong Kong Productivity Centre. He was responsible for the organization of the study

mission mentioned above and some other seminars and training courses on quality circles.

(2) The Director of PA Management Consultants Ltd. and a consultant from Dew Point International Ltd.. Both companies provide consultancy services on quality circles.

(3) The Executive Director of the Federation of Hong Kong Industries. He helped to convey some ideas of local manufacturers about quality circles.

(4) The senior training officer of the Hong Kong Government. He provided information about the civil service's attitude towards the circle concept.

(5) The Chairman of the Hong Kong Industrial Relations Association and the Chairman of the Organizing Committee of 1981 Asia Quality Circles Conference.

Besides the above interviews, the researchers have attended a conference and a series of seminars on quality circles. Valuable information was also collected from materials presented at the functions, views expressed in discussions and casual talks with participants.

We noted that the above respondents are mostly people who have an active interest in quality circles. Their views may not accurately represent the response of most managers who encounter the concept for the first time. In view of this, a comparison group was designed so that we can get more information about local managers' possible response to the circle concept. A presentation on the concept, theory and functions of quality circles was given to a group of practising managers who are also part-time MBA students. Most of them had never heard of

the concept before while a few others had read something about it in newspapers or journals. A structured questionnaire soliciting their opinions was issued after the presentation. It was hoped that the information collected can not only add to our knowledge of local people's responses, but also be used to compare any difference in attitude between those people who are fresh to the idea and those who know much more and even participate in promoting it.

Method of Analysis

Being an exploratory study and since the data collected are mostly unstructured, this research will not attempt to analyse any causal relationship between variables. The major objective is to synthesize various views expressed by the respondents, to show any existing pattern, and to project the possible trend of development.

CHAPTER III

THE QUALITY CIRCLE: THEORY AND PRACTICE

Quality circles originated and prosper in Japan. When it is exported to other countries, the philosophy and operation developed in Japan is still largely adhered to. Therefore for any study concerning quality circles, it is logical to start from the Japanese model. In the following we shall first examine the quality circle movement in Japan: the environment contributing to its birth, its process of development and the advocated philosophy for such activity. After that, we shall try to see how this concept was transplanted to other countries. It is hoped that this information can help us to evaluate the understanding and opinion of local managers of the quality circle concept.

Definition of Quality Circles

The Union of Japanese Scientists and Engineers (JUSE) - the founder and promoter of quality circles¹ in Japan - had formally defined quality circles as follows:

"The QC Circle is a small group which voluntarily

1. The "quality control circle" or "QC Circle" is the official name used in Japan. However, when this concept was exported to other countries, the word "control" was usually eliminated because it had unhappy connotations for workers. In Hong Kong, both terms are in use but the term "quality circle" is more popular, and it would be used throughout this paper.

perform quality control activities within the workshop to which they belong. This small group, with every member participating to the full, carries on continuously, as a part of company-wide quality control activities, self-development and mutual-development, control and improvement within the workshop utilizing quality control techniques."²

This definition highlights the form of operation as well as the objectives of quality circles. In other countries, however, a more straight forward definition such as follows, which concerns mainly the working procedure, is usually adopted:

"A quality circle is a small group of people who do similar work, meeting voluntarily on a regular basis to identify problems, analyse causes, recommend the solutions to management and, where possible, to implement the solutions themselves."³

The Birth of Quality Circles

The quality circle is part of the quality control system in Japanese companies. To trace the birth of quality circles, we must know how Japan started her quality revolution.

After World War II, Japanese industrial capacity had been completely devastated. With technical and financial assistance from the United States, Japan managed to rebuild her production facilities in a short period and

2. QC Circle Koryo, General Principles of the QC Circle, (Tokyo: JUSE, 1980), p.1.

3. David Hutchins, "Ringling the Bell with Quality Circles", Management Today, 1981, pp.4-5.

expanded her exports rapidly. However, at that time, Japan had a general reputation as the producer of "junk". The Japanese were soon aware that the major limitation to her export growth was quality, not price.

Until the end of the war, little or no attempt had been made by Japanese industry to apply serious quality control in production. After the war, the Americans brought in the idea of rational approaches to quality control. In 1949, a Quality Control Research Group was formed within the framework of JUSE and started organizing a number of educational activities on quality control.

In July 1950, Dr. W.E. Deming, an American statistician, was invited by JUSE to conduct a seminar on the basics of control charts and sampling inspection. It opened up a new era of statistical quality control in Japan.

By the mid-fifties, the adoption of statistical quality control was widespread among the first-class industrial establishments and it produced a great deal of benefits for industry in the form of increased profit. However, there remained three problems which were left unsolved:

- (1) A tendency of over-application of statistical methods in industry.
- (2) Standardization was promoted but with too much formality.
- (3) Little or no support and understanding by the top management due to the lack of "quality control consciousness" in them.

In 1954, Dr. J.M. Juran came to Japan from the

United States. In his series of lectures he emphasized that quality control was an integral part of management and not the prerogative of a minority group of specialists. His theory contributed greatly to the emergence of a new orientation of quality control in Japan, popularly called total quality control or company-wide quality control.

Total quality control is a system in which each and all people in the organization hierarchy ranging from the top managers down to the rank-and-file should have exposure to statistical quality control knowledge and jointly participate in the upgrading of company-wide quality control practice. With such an objective in mind, JUSE extended the quality control training from engineers to the first-line supervisors by means of radio programs and various experience exchanging functions.

However, given such extensive training, the foreman's ability to put what he had learnt to use was limited in proportion to the surrounding resources he could make use of, especially the human resources. There remained to be found a mechanism to mobilize the unused resources.

In the early sixties, there was a movement in some companies where foremen organized their workers to conduct a series of quality control discussions at the workshop. This self-developed type of training for workers under the leadership of first-line supervisors was working very well and was noticed by some promoters of quality control.

In 1962, JUSE contemplated the publication of a monthly magazine called "Genba to QC" (Quality Control for the Foremen). In order to make the magazine more meaningful,

the editorial committee suggested to the companies that they should encourage the formation at the workshop level of a group called "QC Circle". This would be headed by a foreman with his subordinate workers participating in studying quality control using the magazine as a textbook. Companies should make such groups function as the core of quality control in each workshop. The committee also requested the circles to register their names with JUSE so as to stimulate self-consciousness and a positive, forward-looking attitude towards the operation of quality circle activities.

Since their birth in Japan in 1962, quality circles have mushroomed in many companies and shown a spectacular growth. In 1980, there were more than one hundred thousand circles registered with JUSE while unregistered ones approached one million.⁴

The Operation of Quality Circles

Summarizing Japanese experience, a typical quality circle consists of a number of workers as members and a foreman or senior worker as the leader. The number of constituent members varies from circle to circle, predominantly in a range from five to ten people. The members usually do similar or related jobs in the workshop.

Quality circles are introduced in a company either spontaneously by foremen and fellow workers, or more usually they are initiated by and under the whole planning of management. In the latter case, formation and activity

4. Kaoru Ishikawa, ed., QC Circle Activities, (Tokyo: JUSE, 1968), pp.1-24.

of quality circles have to be voluntary and are not forced on the employees by the will or regulation of the company.

Quality circle activities start with intensive training of members in basic statistical quality control techniques such as Pareto diagrams, histograms, cause-and-effect diagrams, control charts, sampling and checksheets, etc.. Concurrently, members attempt to identify problems encountered in their work, select the appropriate project, seek possible solutions, and implement the solution under management consent. In the process they draw heavily on knowledge and techniques carried in quality control textbooks and magazines as well as on their own skill and experience. They hold meetings periodically for the above training or problem shooting, usually once a week either on the job with the approval of their superior or after the official working hours.

Circle members make presentations before management and fellow workers periodically on their activities and achievement. Furthermore, quality circles of two or more companies in a regional area commonly get together and jointly sponsor a report presentation meeting in which various improvement experiences are exchanged so that all people in the quality circles are benefited by the accomplishments of others.⁵ Through all kinds of circle activities, members acquire higher sensitivity in quality control at work, increase their cohesiveness in the dynamic process of activity and get the chance to utilize their natural capabilities.

5. ibid, pp.18-21.

Once a number of quality circles are formed and activities are initiated in a company, a promotion secretariat or a steering committee will be formed and a promoter or facilitator will be appointed. However, the division head, the managers and senior foremen are still the people to promote quality circles. The promoter and the quality control staff comprise a service section which is there to help facilitate circle activities. They also serve as a bridge between the quality circles and the management in the steering committee.⁶

The Theory of The Quality Circle

Based on case reports and JUSE publications on quality circles and having regard to the peculiar Japanese cultural and social environment, we have tried to identify three special features about quality circle activities in Japan:

- (1) Quality circles are part of the company-wide quality control system.
- (2) Quality circles are problem solving activities.
- (3) Quality circles have a high motivational power for quality work and self-development.

The implication of these features cannot be understood on the face of it. Each feature is supported by a set of underlying philosophies or is a consequence of certain cultural factors.

6. Masumasa Imaizumi, "How to Initiate and Promote QC Circle Activities", ICQCC '81 - Tokyo, Pre-convention Seminar on QC Circle, JUSE, p.18.

Quality Circles as Part of
the Company-wide Quality Control System

Regarding the issue of quality control, the Japanese all along believed that there were numerous unknown causes for quality troubles and everyone involved in the production process had a chance to notice some of them. Therefore, they relied heavily on self-inspection by workers in the process of quality control. Because of this background, the Japanese were susceptible to Dr. Juran's theory and subsequently developed a company-wide quality control system.

The basic ideas of such a system are as follows:

(1) The function of quality control is to enable a company to provide commodities that satisfy customers' need. This function can be better performed by making every unit within the company understand quality control and by dividing its function among different sectors and levels.

(2) Though divided among sectors and levels, the totality of the function still has to be well coordinated.

(3) Quality is only one of the important control items in a company. While priority is given to quality, it must be kept in balance with other control items such as cost reduction, productivity, pricing, etc. according to the corporate policies.

(4) New concepts and techniques of quality control should be adequately applied in every aspect of corporate activities.⁷

7. QC Circle Koryo, op.cit., p.20.

Under the system, the bottom-line people, including production workers and foremen have to assume responsibility for upkeeping or even improving quality standards. This is quite different from Taylor's system of management and quality control widely practised in the West.

According to Taylorism, methods of doing work should be based on scientific study, not on the empirical judgement of foremen or workers. Hence work planning was separated from execution. Industrial engineers and other specialists were appointed to prepare work methods and production standards. The foremen were left to execute the plan and meet the standards. As for quality control, this system provides a strong impulse to separate inspection from production. That is, to use full time inspectors for product inspection rather than to rely on producers. Gradually it led to the creation of independent inspection department to take over the command of inspectors from the production department so as to achieve objectivity and independence of quality control, and to have quality engineers solving technical problems and setting down quality standards for operators to follow. Under such a system, workers are evaluated on quantity rather than quality. This instigates a "couldn't care less" attitude in workers for quality problems and tends to put the responsibility for checking out defects solely on inspectors.⁸

In theory, a company-wide quality control system, by sharing quality responsibility among all staff, can

8. Joseph M. Juran, "Management Interface", Quality Progress, (May, 1973), p.42.

avoid the above problem. However, if the system is to be effective, the workers must acquire the skills and have the incentive to take up the responsibility.

In this respect, the Japanese had made a major decision - to provide extensive training on quality control through magazines and radio programs to the workshop level. Since the number of targeted trainees was formidably large, the training could not be imposed on them but had to rely heavily on their voluntary will to study. To arouse and maintain the workers' interest in self-study, there must be a mechanism to facilitate the understanding, feedback and application of the techniques learnt. Quality circles are thus designed to perform this function.

The Japanese regard quality circles as effective tools to mobilize the workers to strive for the goal of company-wide quality control. They usually do not promote quality circles for their own sake. As we can see, the most important event in quality control - the Deming Award - evaluates the application of the statistical quality control system and quality consciousness of the company as a whole, and not just on the achievements of quality circles.

Dr. Ishikawa, the founder of quality circles, commented that "quality circle activities are one of the key points to the successful achievement of company-wide quality control. To carry out quality circle activities independently or exclusively, without making use of company-wide quality control, dilutes the goals of quality circle activities. Thereafter it is quite hard

to keep the activities alive and enduring."⁹

Quality Circles as Problem Solving Activities

Quality circles are problem solving oriented. Members not only identify problems in the workshop but also try to find a solution.

Traditionally, managers think and workers work. Now, quality circles require workers to think as well. However, asking someone to think without giving him certain degree of autonomy in decision-making is demoralizing. But proper decision-making requires skills and knowledge which may not be possessed by ordinary workers. Therefore, for quality circles to be effectively implemented, there must be an adequate training for the workforce as well as a delegation of power by upper management.

A basic premise of quality circles' ability to solve problems is the belief in the capability of workers. The theory goes as such. What constitutes a human being is the ability to think. Operators and foremen should not be treated as part of the machinery doing strictly specified jobs. They should have the chance to think and use their mind. Management must recognize how great a potential is available in the workshop. But such potential has to be developed before it can show the real effect. Quality circles provide a chance for the workers to display their ability by effectively employing quality control

9. Kaoru Ishikawa, "QC Circle Promotion in Japan", in International QC Circle Convention 1981 - Tokyo, Tokyo: JUSE, 1981), p.11.

techniques, as well as their own experience, to improve the work. Through the working process, the achievement, and management's recognition, the workers will gradually appreciate the pleasure of thinking and be motivated to study more. Consequently, they will acquire an ability far beyond their previous standards.

While recognizing that the workforce has the potential for solving problems, there is still a question of the willingness of managers to delegate power to these workshop people. It is concerned very much with the authority structure and management style of an organization.

Japanese companies provide a favourable environment for power delegation. The Japanese manage by philosophy. All big companies have their own culture. They have a set of values and beliefs which are usually well understood and accepted by all employees. These implicit values and beliefs again lay down guidelines for decision-making. In addition, their management style is largely paternalistic. The superiors usually command a high respect from their subordinates. Due to these reasons, the behaviour of the lower level can be fairly predictable and thus the lower level is well within their control even without close supervision. The Japanese are accustomed (and in fact can afford) to practise an extensive participative approach to decision making. When an important decision needs to be made, everyone who will feel its impact will be involved. Accompanying this participative style of decision-making is the assignment of collective responsibility. It is the group rather than an individual who is responsible for the success

or failure of any decision.¹⁰ In such a context, a manager is more willing to make delegation because he is sure that he will not held accountable alone for any error made by his subordinates.

However, in Japan, the additional power delegated to the workforce because of quality circle activities is not as significant as some may expect. Traditionally, their management paid little attention to what was going on at the operational level and a great deal of planning and autonomy were left to the lower level production force. So individual workers and foremen had a considerable influence upon the product quality and other work related matters even before the introduction of quality circles. Quality circles in effect help to formalize the problem solving activities of workshop people and make them part of the overall management system.

Quality Circles as Motivational Mechanisms

The third but also the most important feature of quality circles is their ability to generate among the workers an interest in workshop improvement, a desire for self-development, and a sense of quality, productivity and problem consciousness.

Besides the structural features mentioned above, quality circle activities have two additional characteristics which can account for their motivational

10. William Ouchi, Theory Z, (U.S.A.: Addison-Wesley Publishing Co. Ltd., 1981), pp.39-51.

power: voluntary participation and group dynamics.

According to psychologists, a person is motivated to do his best if he wants and initiates to do something, rather than being told to. For quality circle activities, workers are free to decide whether to join or not. Sometimes they are also free to select projects for study. While management does monitor the circle's progress, it does so by means of promotion, guidance, training, evaluation, authorization and recognition, not by coercion and pressure. The spirit is that people do things of "their own will", not because they are "told by somebody else to do so and so." JUSE emphasizes very strongly this aspect. Its reasoning is that by voluntary participation, workers will treat the circle as their own activity and will care about it. Compulsory programs demoralize the people involved and will be felt as another management tool to exploit further effort from workers.

However, for managers to understand and respect the voluntary nature of quality circle activities, they must have a trust in the people's voluntary will. That is, they must believe that if people are trusted and left to work on their own, they can be motivated to work well.

Another characteristic of quality circles is that members in a circle work as a group, not as individuals. This property generates the following effects which are highly motivating:

- (1) A sense of accomplishment: Quality circles pull together multiple skills and talents of members so that it can accomplish projects which cannot be performed

by an individual. The resulting recognition from peers and management reinforces circle members' interest in improving work by their own thinking and suggestion.

(2) Improved communication: Anyone in the workshop will sometimes have ideas or notice problems relating to his work. But he may not have the chance and courage to put forward these views. Or even if the views are aired, they may not attract a serious consideration from the busy superior. Through quality circles, multiple views can be expressed and attract better attention from management. Management's feedback can also be effectively channelled. This will help to reduce grievances and improve mutual understanding between workers and management.

(3) Self-development: Quality circle activities such as group discussions, data collection and problem tackling, presentations, exchange meetings, etc. provide group pressure and create an atmosphere in which everyone wants to learn and give out something without being left behind. In addition, the fact that circle members do learn and achieve something reinforces their desire to learn and think.

(4) Better human relations: Through contacts and interactions in circle activities and through the sharing of common problems, members begin to recognize each other and create harmonious relations. Furthermore, as any achievement of quality circles belongs to the group rather than individuals, it helps to nurture team spirit and improve cohesiveness.

(5) Active workshop control: The major concern of

quality circles is to remove causes of abnormal conditions in the workshop and to ensure that jobs can be performed up to an acceptable standard. In other words, quality circles help to establish workshop control through the initiative and planning of workers instead of strict orders from superiors. In this case, workers are more willing to accept changes and to make improvement.¹¹

As a result of the above motivating effects, quality circles gather the energy to solve problems and to improve quality, while circle members derive more satisfaction from their job and have a higher morale.

Enterprise and Humanity

Summarizing the above discussions, it can be seen that a basic attribute of quality circles is that they place equal emphasis on the well-being of enterprise as well as the individual.

On one hand, the objective of quality circles is to contribute to the improvement and development of the enterprise. As the theory goes, when a pie gets larger, so does the individual share of that pie. If quality circles boost company profits, eventually the contributing members will be benefited by increased income.

On the other hand, quality circles also have a strong emphasis on the individual. As promoted by JUSE, a basic idea of quality circles is that they help to enhance human dignity, develop human capabilities, and build a

11. cf. QC Circle Koryo, op.cit., pp.26-53; and David A. Nadler, et., Managing Organizational Behavior, (Toronto: Little, Brown & Co., 1979), pp.101-105.

happy bright workshop which is meaningful to work in. It is argued that "....People spend much of their life-time at their working place. It would be much more desirable to work in a pleasant place.... Among human desires, the desire for money is no doubt strong.... (But) people have other kinds of desires, such as wanting to be recognized for their work, a desire for social recognition, a desire for personal development, and a chance to display one's ability, etc.. The QC Circle can satisfy these desires and should be so designed."¹²

A message given by Dr. Ishikawa has best highlighted the above philosophy: "A people-building philosophy will make the quality circle program successful. A people-using philosophy will cause the program to fail."

This extraordinary concern with people combined with a practical approach to problem solving distinguishes quality circles from many other management techniques. Nevertheless, there are doubts as to what extent can the above ideal be carried out in practice.

Results of Quality Circles in Japan

Regarding the tangible contributions of quality circles in Japan, Mr. Joji Arai, Director of the Washington, D.C. office of the Japan Productivity Centre, reported that the average quality circle produces fifty to sixty implemented suggestions per worker each year. As there are more than a million circles, it adds up to millions of work improvement suggestions which have contributed

12. QC Circle Koryo, op.cit., pp.21-23.

substantially to the product quality and productivity of the Japanese firm.¹³

Intangible results are unmeasurable. But there are numerous cases reporting that quality circles have significantly improved workers' motivation as well as competence.

As quality circles are part of the Japanese quality control system, their effects are affected by a lot of environmental factors. It is in fact very hard to determine which part of the alleged achievements is attributed to quality circles and which a result of company-wide quality control system, overall management style, or even government assistance. Some people suggest that about ten percent of Japanese success in quality and productivity is due to quality circles. But there is no way to verify this.

While the Japanese are proud of their quality circle achievements, they have to confess that there are also a lot of circles which are operated in a way far from ideal. Even in those plants recognized as having the best operating programs, management knows that perhaps only one-third of the circles are working well, with another one-third borderline and the remaining simply making no contribution at all. Although circle activities are advocated as voluntary, in some companies the workers clearly perceive them as coercive. Another pitfall which many quality circles tend to commit is sheer formality. Many circles, though organized, remain fairly often inactive

13. William Ouchi, op.cit., p.262

and dormant. They hold no meetings at all, or even if they hold a meeting, it ends up as a social gathering that has nothing to do with quality control and self-development. Some causes are identified, such as the lack of support from a company-wide quality control system, the failure of circle members to study quality control techniques, a lack of support from top management, etc., but there is still something lacking.

In fact, quality circle activities reached their height in Japan in the seventies. In recent years, there have been signs that the enthusiasm for quality circles is gradually cooling down. Japanese companies face a continuing struggle to revitalize circle activities to ensure that it does not degenerate into ritualistic behavior. In short, while the Japanese do work very hard to solve these problems, they have not yet got all the answers on how to conduct such participatory activity.¹⁴

Quality Circles outside Japan

Quality circles were first introduced overseas by the Japanese in 1966 when a special quality circle session was organized at the 10th Conference of European Organization for Quality Control held in Stockholm. While the concept had aroused much interest, the participants felt that it was not applicable in the Western Hemisphere and no action was generated.

It was not until 1973 when Mr. Wayne Reiker, the

14. cf. Kaoru Ishikawa, *op.cit.*, pp.33-35; and Robert E. Cole, "Will QC Circle work in the U.S.?" Quality Progress, July 1980, pp.30-31.

manufacturing branch manager of Lockheed Missile & Space Co. of the United States, having been impressed by the circle concept, implemented a similar program in his plant. For the three years following 1974, Lockheed saved three million dollars as a result of the program. This achievement had induced a number of other companies to try out the idea in their plants. Most of these pioneers are manufacturers of aircraft, computer and electronic components. This phenomena may be due to their closer contact with the Japanese and the strict quality requirement of their products. However, the initial growth of the circle movement in the States was slow. Only about twenty five companies were involved in 1978. But the rate soon accelerated and the number of organizations that were exploring circles leaped. By 1980, there were signs that many people were viewing quality circles as a panacea.¹⁵

In 1977, Rolls-Royce of the United Kingdom, due to business contacts with Lockheed, was also induced to implement quality circles in its Aero Division in Derby. The resulting saving was again significant. In 1979, a series of public seminars on quality circles were held and they sparked the general interest in the circle program in the United Kingdom. The take-off was rapid. By 1981, there were more than five hundred circles in operation.

In Scandinavia, quality circles have started to

15. Frank M. Gryna, Quality Circles, (New York: AMACOM, 1981), p.15.

take root but the scale is still limited.¹⁶ In Europe, the development has been slower except within the U.S. owned multinationals. This is partly because the consultants have been less active there and partly because of the more authoritarian organizational structures of European companies which offer less fertile ground for growth. The lack of an acute quality problem may also be a reason.¹⁷

In the developing countries, quality circles grow much faster. In the Far East, Taiwan has the longest experience. Because of the keen promotion of the Pioneer QC Research Association since 1967, quality circles are now widespread in manufacturing firms in Taiwan. The circle concept is also well accepted in other Asian countries such as Singapore, Philippines, South Korea, etc. and the development there is usually supported by governments or public authorities.¹⁸ Comparatively, Hong Kong is late in knowing and considering the concept.

The purposes and practices of quality circles in different countries vary significantly from one to another. Western Europe and Scandinavia mainly treat quality circles as another program to relieve job monotony and improve workers' satisfaction. In Asia, the circles' effect on productivity and quality is the major attraction. In the United States and the United Kingdom, the situation is

16. A. Aune, "Quality Circles: Experiences from Four Years of Work in Norwegian Companies", International QC Circle Convention, 1981 - Tokyo, pp.141-148.

17. Christopher Lorenz, "Motivation: Japan's new Export", Financial Times, January 26, 1981.

18. International QC Circle Convention, 1981-Tokyo, pp.133-236.

mixed. Some companies are concerned very much with measurable results, while others emphasize motivation, the quality of work life and communication. These variations are due to the differences in respective social systems and values, initial perception of the circle concept, the emphasis placed by the promoting agencies, and preoccupations or major problems of the concerning countries or companies. Due to insufficient research into this field, it is still impossible to evaluate to what extent the effects of quality circles are affected by these variations.

Other than Japan, the United States is the country which has developed most materials on quality circles, and which has exerted a lot of influence on the circle movement of Asian and European countries. This is partly due to the language convenience and partly because of the fact that the pioneers of circle activities of these countries are usually subsidiaries of American multinationals.

The Americans have made certain modifications to the theory and practice of quality circles. On one hand, they have rationalized the circle activity with Western management and motivational theories. On the other, they tend to change some of the structural features of quality circles practised in Japan.

In fact, it is easy to notice that there are similarities between the philosophy of quality circles and theories of behavioral science. In general, the Americans have used the theories of Douglas McGregor's Theory Y, Abraham Maslow's need hierarchy and Fredrick Herzberg's hygiene and satisfying factors to explain most of the

functions of quality circles.

As for the structural aspect, we can see the following:

(1) The U.S. companies are usually concerned very much with measurable results. They are accustomed to calculating the savings resulting from various circle suggestions. A reason for this may be the need for American managers to face the scrutiny of cost-benefit justification.

(2) The role of facilitators is very critical in most circle programs while that of foremen is less emphasized. The U.S. companies generally do not have a company-wide quality control system such as Japan has, and their circle programs are normally under the supervision of the quality control department, the manufacturing department or the personnel department.

(3) The U.S. companies usually adopt quality circles in conjunction with other management programs such as the quality of work life program, suggestion systems, industrial democracy, job enrichment programs, etc..

(4) Most U.S. companies rely extensively on consultants to set up their circle programs.

(5) Middle managers usually have very little involvement with the circle program.

From the experiences of so many countries, it seems that quality circles can be implemented in places other than Japan. However, whether the circle program can survive long and produce significant effects on productivity, quality and motivation in other countries as it has in Japan is still open to question. As for Hong

Kong, we are now at a very preliminary stage and our major interest is whether we should and can implement quality circles in our organizations.

CHAPTER IV

QUALITY CIRCLES:

THE HONG KONG EXPERIENCE

In this chapter, we shall summarize the opinion and information collected from our interviews and observations. In this research, the major group of respondents are forty-four middle management people who are either participants of the Asia Quality Circles Conference and the Quality Control Circle Study Mission to Japan, or coordinators and facilitators of local quality circle programs (This group will be referred to as "the respondents" in the following analysis). The bio-data of these respondents are summarized in Table I. Basically, this group consists of people of various industries and professions.

In addition to the above, there are also views collected from consultants and other interested parties, a name list of which was mentioned in Chapter II (pp.10-11). These views will be included in the following analysis where ever appropriate.

Furthermore, we have also sent questionnaires to fifteen part-time MBA students who have attended an one-hour presentation on quality circles. Responses of this group will be used for comparison with those of the above respondents and we will refer them as the comparison group

in the following. The background of this group of people is also included in Table I.

Table I: Bio-data of Respondents

	<u>No. of Persons</u>	
	<u>respondents</u>	<u>comparison group</u>
<u>A. Occupation:</u>		
personnel/training	15	1
production/engineering	18	6
quality control	5	-
administration/accounting	4	2
computer	-	5
finance	-	1
government officer	2	-
	<u>44</u>	<u>15</u>
<u>B. Industry:</u>		
manufacturing	33	4
trading/service industry	9	6
government/public authority	2	5
	<u>44</u>	<u>15</u>

Who Brought in the Concept?

To some people in Hong Kong, the concept of quality circles is not new, but this is not the case for the majority of the population here. As revealed by our research, there are a few people who have encountered the concept several years ago. In fact, the Hong Kong Productivity Centre (HKPC) had tried to introduce the concept in some of its management courses for the past decade, but the response was poor. It was thought that Hong Kong was not yet ready for such new idea.

Two years ago, the HKPC noticed that Japan was going to hold an International Convention on quality circles in September 1981 so that overseas practitioners could exchange experience. In view of the fact that the circle concept has attracted worldwide attention in recent years, the HKPC decided to re-introduce it and proposed to organize a study mission to join the Convention and to visit practising companies in Japan. The proposal was well accepted and nineteen members from ten companies participated in the mission. It turned out that upon return, most of these companies decided to implement quality circles in their plants.

Coincidentally, Dr. K.K. Tse, the Personnel Manager of Lam Soon (H.K.) Ltd., attended a conference on quality circles in Kuala Lumpur in March 1981 and was deeply impressed by the concept. On his return, he published some articles on the desirability and feasibility of adopting quality circles in Hong Kong. He has also given a number of public lectures on the subject to various companies and associations, including the Hong Kong Management Association (HKMA) and the Hong Kong Industrial Relations Association (HKIRA). The members of the HKIRA, being convinced that the concept could be useful for local companies, organized the Asia Quality Circles Conference in November 1981, just after the Mission of the HKPC. The Conference was attended by over eighty participants from around sixty organizations. It has also stimulated a lot of propaganda on quality circles and aroused the attention of local managers. All of a sudden, there is a surge of

interest on quality circles and a few companies have begun to try the idea. In addition, the participants of the Conference had decided to form the Hong Kong Association of Quality Circles.

Up to the first quarter of 1982, a number of seminars for management, and training courses for circle leaders have been organized by the HKPC, HKMA and the Hong Kong Association of Quality Circles. The attendants are mainly from the same group of companies which joined the above Conference or Mission. However, due to occasional propaganda in newspaper, journals and television programs, more and more people have become aware of the idea.

Table II: Highlights of the Circle
Movement in Hong Kong

early 1980	HKPC proposed to the Government a plan of a study mission on quality circles to Japan in 1981. The plan was approved.
late 1980	An Electronics company implemented the first quality circle in its plant, but the action was not known by other companies.
Mar. 1981	Dr. K.K. Tse, the Personnel Manager of Lam Soon (H.K.) Ltd., attended a quality circle conference in Malaysia and was deeply impressed.
Apr. - Sept. 1981	Dr. Tse made an effort to promote the circle idea among local managers. He conducted courses on quality circles at the HKMA, and gave a number of public lectures to various organizations, including HKIRA and Shui On Holding Ltd.
June 1981	A pilot program of quality circles was established in Lam Soon (H.K.) Ltd. The program has gained much attention from the public. A TV feature has also introduced this circle program at a later date.

Sept. 1981	Mr. M.K. Cheung, senior consultant of HKPC, gave a speech on quality circles in a Rotary Club meeting. The speech was widely publicized in newspapers and had aroused much public interest.
Sept. 1981	The Quality Control Circle Study Mission started for Japan and was participated by nineteen members.
Nov. 1981	The Asia Quality Circles Conference was held in Hong Kong and was well attended.
Nov. 1981	The Conference participants resolved to organize the Hong Kong Association of Quality circles.
Dec. 1981	A series of "QCC Leaders Training Course" and "Seminar on QCC for Senior Management" was held by HKPC.
Nov. 1981 - Mar. 1982	A number of companies started to set up circle programs in their plants.
Mar. 1982	A "Seminar on Quality Circles" for experience sharing was held by HKIRA and Hong Kong Association of Quality Circles.

People Who Know the Concept

Among our respondents, we find that they learned the concept of quality circles from various sources. Details were shown in Table III. Information from our comparison group is also included.

It is interesting to note that 58 percent of the respondents had knowledge of the concept before mid-1981, that is, before any promotion on quality circles in Hong Kong. It indicates that the first activities on quality circles attracted the attention of this informed group of people better.

Reviewing our comparison group, we find that one-third have never heard the concept before the researcher's presentation. Two-thirds have just a basic idea gained

from local newspapers or journals very recently. Only one out of fifteen persons had attended a seminar on quality circles before the interview. It is of interest whether this represents the general situation of local managers' knowledge of quality circles.

Table III: Sources from Which People Learned
of the Concept of Quality Circles

A. Respondents:

<u>Percentage (%)</u>	<u>Sources of Knowledge</u>
34*	foreign journals
11*	contacts with the Japanese
13*	U.S. headquarters or other affiliated overseas plants
11	HKIRA (Dr. K.K. Tse's talk)
16	local journals and newspapers
10	promotional materials of the Asia Quality Circles Conference and the Conference itself
<u>5</u>	colleagues
100	

B. Comparison Group:

<u>Percentage (%)</u>	<u>Sources of Knowledge</u>
60	the researcher's presentation
33	local journal and newspaper
7	overseas seminar on quality circles
<u>100</u>	

* All these three groups of respondents gained the information on quality circles prior to mid-1981.

Among the respondents, the depth of knowledge on quality circles varies a lot from person to person. (see Table IV) As for the comparison group, all persons said that they have just a shallow idea about the concept.

Table IV: The Respondents' Knowledge
about Quality Circles

<u>Percentage (%)</u>	<u>Depth of Knowledge</u>
5	indepth knowledge
26	considerable knowledge with experience of observing or participating in circle activities
26	some knowledge about theory and practice from literature and seminars
19	knowledge mainly from the Conference and a few readings afterwards
24	knowledge limited to what was heard in the Conference
<u>100</u>	

The above table shows that 57 percent of the respondents (consisting of the first three groups) have acquired a good knowledge of the concept. It is also of interest to note that most of these people are those who have known quality circles for some time.

Based on the above results and some other interviews, we can roughly identify four groups of people in Hong Kong according to the sources from which they heard the concept of quality circles:

(1) A small group of managers who have learnt the concept some time ago from foreign journals, contacts with Japanese businessmen or information from their overseas plants which have already implemented quality circle programs. Usually this group of people have a better knowledge of the theory and practice of quality circles and some have even observed circles in action.

(2) Some people heard the concept for the first time from the conference, seminars and public talks held

in the past year. There are several hundred people in this group according to the lists of participants in these activities. Their knowledge of the concept ranges from a basic idea to a certain understanding of its objectives and operation. Of course there are a few people, especially the facilitators and responsible managers of newly established circle programs, who have strived hard in this year to master more knowledge and skills of quality circles.

(3) For those companies which have implemented circle programs, usually part or all of their staff including supervisors and workers would have a basic idea of the concept introduced by their colleagues. Circle members and leaders may also have received training on circle techniques. According to the data provided by these companies, there are around a thousand people of various working levels who have learnt the concept from this source.

(4) Finally there are people who came across the concept only from local newspapers, journal articles or television programs. It is hard to estimate the number but usually these people know very little about quality circles.

Basic Trust in Quality Circles

Basically most of our respondents believed that quality circles, if implemented effectively, can offer improvements to certain aspects of organizational activities. Only a few indicated their doubts about the circles' real power and their applicability in places other than Japan.

However, in our comparison group, while everyone believed that quality circles have certain functions, nearly half of them thought that the circles' real contribution were generally exaggerated. This implies that for those people who are less informed about the concept of quality circles, their attitude tends to be more skeptical. Details of the responses are shown in Table V.

Table V: People's Confidence in Quality Circles

A. Respondents:	
<u>Percentage (%)</u>	<u>Degree of Confidence</u>
91	generally believe in the circles' functions
7	not sure about the circles' real power
2	think that quality circles were culturally bound and worked only in Japan
<u>100</u>	
B. Comparison Group:	
<u>Percentage (%)</u>	<u>Degree of Confidence</u>
53	generally believe in the circles' functions
47	quality circles have certain functions but the effect is generally exaggerated
<u>100</u>	

What People Think a Circle Can Do

Our respondents have suggested a number of functions which, in their opinion, can be achieved by quality circles. (see Table VI) We notice that all the respondents mentioned that quality circles can contribute to the improvement of certain human problems, such as motivation, communication,

Table VI: People's Idea of the Functions
of Quality Circles

No. of Persons		People's Idea of the functions
Respondents	Comparison Group	
19	5	motivate employees to have an awareness of their duty, initiative to assume responsibility, and a positive attitude towards work
16	7	facilitate internal communication, provide a channel for lower level staff to voice their opinion and pick up unnoticed problems in the workshop
15	-	raise productivity & efficiency
10	5	improve quality of products
9	1	nurture among workers a sense of belonging, loyal & reduce turnover
9	2	improve human relations, especially employer/employee relations
5	7	create job satisfaction and a sense of achievement among workers
4	4	provide training and development to employees
4	-	reduce costs

sense of belonging, etc., but there are marked disagreement about whether quality circles can achieve measurable benefits on productivity and efficiency. While 15 respondents (35%) believed that circle activities can help to raise productivity and reduce costs, at least three rejected this idea and several others thought that no measurable results can be achieved in the short run. One even said that if a company has problems of poor quality and productivity, it can always find other solutions which are more direct and effective than quality circles.

Results gained from the comparison group show an interesting point. While most of the people thought that quality circles can improve communication, create job satisfaction, enhance morale and raise quality, none said that it can improve productivity. We do not know the exact reason for the differences in opinion between the respondents and the comparison group in this aspect, but we guess that it may be due to different emphasis in the presentations they attended. This indicates the importance of selecting adequate tone and emphasis in introducing and promoting such a new concept.

Can Quality Circles

be Implemented in Hong Kong

Regarding the question whether quality circles can be implemented in Hong Kong, there are significant differences in opinion among the respondents. (see Table VII)

Table VII: People's Opinion of the Applicability of Quality Circles in Hong Kong

<u>Percentage (%)</u>		<u>Opinion of the Applicability of quality circles in HK</u>
<u>Respondents</u>	<u>Comparison Group</u>	
42	27	relatively optimistic
28	53	relatively pessimistic
12	13	workable only in certain types of industry/companies of cer- tain employment sizes
11	-	people will follow successful examples
5	-	nearly impossible to implement them in Hong Kong
<u>2</u>	<u>7</u>	unsure
100	100	

The above table shows that nearly half of our respondents felt that there is potential for quality circles to take root in Hong Kong. However, it does not mean that the process will just be natural. It still requires a lot of preparatory work, long term planning, and full support from management. Even so, the rate of success will not be high, but there is no harm trying.

Nevertheless, there are 12 respondents (28%) who commented that while it may be possible to implement quality circles in a few companies, it will be a very difficult job to run the program successfully and to make the concept popular in Hong Kong. They are not optimistic about the prospect but do think that it is worth trying, for as some said, the costs involved will not be high and there will not be any significant adverse effects. However, one respondent cautioned that quality circles, by enhancing workers' cohesiveness, may lead to unionisation.

Some other respondents felt that there are certain limitations for the implementation of quality circles. One thought that it is applicable only in the manufacturing industry. Others thought that types of production and kinds of product also matter. It is most interesting to note the divergent opinions about the effect of the company size on the applicability of quality circles. Some said that quality circles should be applied in smaller companies since it makes persuasion and control much easier, but a few others thought that circles are only meaningful to large companies. If there are just a few employees in the workshop, they can always meet and discuss

even without a circle program.

A few respondents also commented that Hong Kong people like to follow successful examples. So the prospect of circle movement in Hong Kong will depend very much on the achievements of the pioneering companies. Anyway, quality circles sound like a management fad at the moment and a respondent warned that people should not be superstitious about their effects or treat it as a panacea.

Among the respondents, only two thought that quality circles cannot be successfully implemented in Hong Kong.

A particularly interesting remark was made by one of the respondents. He said that quality circles can be more easily promoted when there is an economic recession. At such a time, there will be lower turnover and workers will be more obedient and willing to accept changes.

As for the comparison group, the general attitude tends to be more pessimistic. While no people thought that it would be impossible to implement quality circles in Hong Kong, more than half felt that the program may only be successfully implemented in just a few companies, say less than twenty. Only four persons expected a larger scope of application.

Prerequisites for a Successful Circle Program

The respondents have mentioned a number of prerequisites which in their opinion are essential for the successful implementation and maintenance of quality circle programs. Table VIII shows the frequency with which these prerequisites were reported as essential for

success.

Table VIII: Prerequisites for a Successful Circle Program in the opinion of Respondents

<u>Frequency</u>	<u>Prerequisites essential for Success</u>
30	top management support
8	good compensation scheme
7	effective management
5	adequate method of implementation
4	workers have sense of belonging, loyalty and low rate of turnover
3	middle management support
2	good employer/employee relations

It is obvious that top management support is regarded as a major prerequisite if a circle program is to be successfully implemented. By top management support, it is meant that upper level managers should understand and believe in the function of quality circles, be willing to invest money and time in training, incentive schemes and administration of circle programs, promote and implement circles with sincerity, not be preoccupied with measurable results, and be willing to consider and implement circle suggestions, including those concerned with improvement of benefits or working environment. Three respondents added that middle management's reinforcement is just as important.

A good compensation scheme is also an important prerequisite. The respondents felt that the basic concept of quality circles is a matter of give-and-take. Only when managers treat workers fairly, ensure them job

security and let them have a share in the company's prosperity, can we expect them to have initiative to contribute something valuable to the company. This factor was also regarded as closely related with another two prerequisites: workers' loyalty and good labor relations.

Another important factor frequently mentioned is effective management. It was commented that quality circles require the back-up of an efficient management system, rational decision-making process, professional management skills, an open-minded attitude and a participative style.

Whether the circle concept is skilfully sold to workers and the program adequately implemented are also regarded as a determinant to its success or failure. A number of respondents warned that we should not copy the Japanese model but must modify it so that it can fit the local environment as well as the objectives and climate of individual company.

Difficulties in Implementing Circle Programs

All the respondents admitted that to implement quality circles in Hong Kong, they will have to face many difficulties. The difficulties and the frequency mentioned were shown in Table IX.

Let us go through those opinions expressed by the respondents in detail.

- Workers' motivation and initiative:

Firstly, many respondents worried that workers will not be willing to join circle activities. The management is partly responsible for the problem because

Table IX: People's Opinions of the Difficulties
in Implementing Circle Programs

A. Respondents:

<u>Frequency</u>	<u>Difficulties</u>
17	workers have no motivation & initiative
8	workers are too money-oriented
6	workers' educational level is too low
5	cultural and social limitations
5	both managers and workers are short-sighted
4	management distrusts workers' potential
4	managers and workers do not have sufficient knowledge about quality circles & quality control
4	workers do not emphasize job satisfaction
2	workers' quality
1	government

B. Comparison Group:

<u>Frequency</u>	<u>Difficulties</u>
9	workers have no motivation & initiative (because of high turnover & no sense of belonging)
6	workers are too money-oriented
5	managers are not ready for workers' participation in decision-making
3	managers do not accept the idea
3	local companies are too small for circle activities
1	people are not informed of the idea
1	there is a lack of trained personnel to implement circle programs

it has not provided an environment to induce the workers to stay longer. Therefore, if the management has no intention to treat the workers fairly, e.g. providing job security and an adequate compensation scheme, there

is no way to implement a circle program successfully. A few respondents compared Hong Kong with Japan. They argued that quality circles are successful in Japan because workers there enjoy life-time employment and comprehensive welfare schemes, their success and failure are contingent upon that of the company. Thus the workers have strong motivation to participate in any company-wide improvement endeavour. But this is not the case in Hong Kong. One respondent even said that unless a retirement scheme or a provident fund is set up in his company, he will not consider the implementation of quality circles.

- People are short-sighted and money-oriented:

Two other factors mentioned by the respondents are closely related to the above. That is, Hong Kong people, including workers and managers, are short-sighted and opt for immediate monetary rewards. The keen competition and rapid changes in the environment, together with the uncertain political outlook, make local managers and entrepreneurs too concerned with immediate payback. So either they show no interest in quality circles, or, as in some cases, they talk about the circle concept because it is fashionable or they run the program thinking that it will be a cure for all ills. Sooner or later, as a few respondents commented, these companies will drop the program when they realize the real amount of investment required or are disappointed with the lack of immediate measurable results. A few may maintain the form but not the substance of circle activities. In other words, if local companies cannot hold a long-term view of quality

circles, it is very hard for them to have a successful program.

As for workers, since they usually do not think that they will stay long enough in a company to gain benefit from its long term development, or perhaps they just do not believe in their employers' promise for future profit sharing, they will not be willing, or have the initiative, to do something for nothing. Their major interest in their daily work is the pay. Developing along this line, several respondents stressed that in the case of Hong Kong, there must be certain incentive schemes to go along with quality circle activities, for instance, overtime pay. Nevertheless, there are one or two interviewees who insisted that circle members should not be rewarded immediately, though their efforts and achievements can be recognized in some other ways, such as free lunches or soft drinks, company sponsored outings or dinners, the right to use the boardroom, presentations to management, etc.. It may also be important to note that, in our interviews with a few circle members, they said that they do not care about overtime payment but prefer to have circle meetings within working hours.

- Workers' educational level:

One other problem mentioned is about workers' ability to run quality circles. A few people worried that since the general educational level of Hong Kong workers is quite low, especially compared with that of Japan or the United States, it is doubtful whether they can absorb the knowledge on quality control and problem solving

techniques. In fact, it may even be difficult to motivate them to accept the training at all since they may be scared right away. There is also difficulty in selecting an adequate circle leader who knows how to or can be trained up to conduct meetings, lead discussions and motivate members. However, there are two respondents who do not think that poor education should be a barrier to workers joining quality circles.

- Cultural and social limitations and managers' attitude:

Some people are concerned with certain social and cultural factors in Hong Kong which may pose problems in developing circle activities. For instance, Chinese people are more reserved and not accustomed to speak up. They like to do what is told by their superior rather than making decisions themselves. They are also relatively slow to accept changes. One respondent also pointed out that quality circles work on the basis of peer group dynamics. However, in Hong Kong people rarely form peer group with their colleagues, or even if there are some, the groups' influence on the member's attitude and behavior at work is generally very weak. An effective quality circle must change this relationship and it will mean a difficult job. However, another respondent held just the opposite view. He felt that Hong Kong people are already more group conscious and less individualistic than the Western people. This means that quality circles should have a better chance of success in Hong Kong. Another respondent commented that while the basic spirit of quality circles is to respect the individual, Hong Kong people in

reality do not have a respect for human beings. They respect a person because of his wealth, education, status, profession, etc. but not because he is a human being who should have a right to be respected. In fact, four other respondents also felt that many managers do not believe in the workers' ability to solve problems, which means that they are not ready for real worker participation in decision-making.

- Workers' concern with job satisfaction:

While many respondents agreed that quality circles can create job satisfaction among workers, they are aware that Hong Kong workers do not really care about job satisfaction. The workers are kept busy with television programs, mahjong, horse-racing, window shopping and a lot of other hobbies so that they can always derive satisfaction from these activities. Work is something which can support them to maintain a living and to look for such after-work pleasures.

- People's lack of knowledge and workers' quality:

There are a few people who thought that the lack of basic knowledge and awareness about quality among both managers and workers, and the fact that some workers are spoiled and disobedient, will also make the implementation of quality circles quite difficult.

- Government support:

Lastly but not the least, one respondent stressed that in many other countries, such as Japan, Singapore, Korea, etc., the quality circle movement is promoted by the government which provides a lot of supportive facilities

such as training and experience sharing. In Hong Kong, however, we have not yet heard a word from the government. Some even suspect that the government disapproves such activities for fear of any possible adverse effects resulting from real cooperation of workers, especially the development of a union movement. In view of this, it can be expected that the circle movement in Hong Kong can never achieve the status of that in Japan.

According to the above discussion we can conclude that most respondents hold the following attitude: If we want to introduce quality circles in our companies, top management support as well as their willingness and ability to provide a favourable environment are most important. But to make the program take root in the workshop, major difficulties may come from workers' reluctance and local social values.

Here we must note a consultant's warning about the investment required for quality circle programs. He estimated that if a company wishes to introduce ten circles, total costs for the first year may be as high as a quarter to half a million Hong Kong dollars. This includes out of pocket expenditure on course fees, training materials, salary and training for facilitator, incentive payment and overtime pay, promotional materials, etc.. There are also a lot of costs which are directly related but have not been calculated, especially wages and salaries paid for circle members and supervisors during meetings and training, as well as managers' time involved. Nevertheless, local managers tend to ignore the latter

cost. In fact, a few respondents thought that circle programs will not involve much investment. The major ones will just be costs of training and incentives.

As for our comparison group, basically they have quite similar response as the respondents. However, it seems that they have not placed such a heavy emphasis on management support as the respondents but are concerned more with workers' motivation and turnover.

Will They Try Circles in Their Companies?

To examine a person's real acceptance of a new management concept, the best way is to know whether he will implement it in his company. The willingness of our respondents and persons in the comparison group to try quality circles in their companies are shown in Table X.

Table X: People's Inclination to Implement Quality Circles in Their Companies

A. Respondents:	
<u>Percentage (%)</u>	<u>Inclination or Action</u>
21	have circles running in the company
16	are at a training stage and will have circles running soon
8	have started feasibility studies
3	are interested but the idea was rejected by top management
16	have no intention to form circles now but may consider later
13	feel not applicable to their companies
13	have not yet considered the issue
8	feel no need because they already have similar group discussion activities
<u>2</u>	won't try because it is very difficult
100	

B. Comparison Group:

<u>Percentage (%)</u>	<u>Inclination</u>
15	are interested but not in a position to promote it in the company
39	are interested but the idea is not applicable to their companies
<u>46</u>	are not interested
100	

According to the above table, we can say that around 45 percent of our respondents (consists of the first three groups) have been running or will run some forms of circle programs. This is a very high proportion. But we have to note that the majority of this group had an interest in quality circles before the Conference or the Mission. A few had even decided to start the program before attending these activities.

There are four respondents who felt that quality circles are not applicable to their companies. They are engaged in construction, marketing and equipment maintenance.

For the remaining (29%) who had no intention to implement quality circles in their companies, they generally want to wait and see. If there are practical examples which can demonstrate that quality circles are applicable in Hong Kong and have identifiable functions, they may reconsider the issue. But a few also said that even then they still have to examine the costs and other prerequisites required before making any final decision. There are also three respondents who felt that they have no need for a circle program because their staff already have problem-solving discussions frequently. Only one

person said that he will not consider the idea because it is very difficult for quality circles to be successful in Hong Kong.

The situation in our comparison group is quite different. None of them had been running or considered to run circles. About half showed interest but either they are not in a position to promote the idea or quality circles are not applicable to their companies. Another one-third are just not interested in the concept. The remaining ones prefer participative management but not quality circles. For a promoter of quality circles, such response should be very disappointing. But does this reflect the normal response of the average managers?

Actual Experience with Quality Circles

Up to April 1982, there were less than twenty companies which have actively engaged in activities concerning quality circles. In this research, we have identified fourteen companies which have either been running circles for some time or are still at a planning and training stage. Some basic information about these companies are shown in Table XI.

Table XI: Basic Information about Companies
having Circle Programs

A. Industry:	
<u>No. of Companies</u>	<u>Industry</u>
6	electronics
3	electrical appliances
2	machinery
1	foodstuff and cleanser

1	metalware
1	construction

B. Ownership:

<u>No. of Companies</u>	<u>Ownership</u>
8	affiliated companies of U.S. multinationals
3	local investment
2	with Japanese capital
1	with South East Asian capital

C. Total Employment Size:

<u>No. of Companies</u>	<u>No. of Workers</u>
6	below 300 workers
3	300 - 500 workers
5	above 500 workers

D. Length of Circle Programs:

<u>No. of Companies</u>	<u>Length of Circle Programs</u>
2	more than 9 months
6	less than 6 months
6	at a planning and training stage, no circle running yet

In the following, we shall summarize these companies' experience with their circle programs, and see if we can identify and explain any special features.

(1) Why do They Introduce the Quality Circle Programs?

In Table XII and XIII, we have shown the reasons why the companies implement the circle programs as well as the sources from which they learned the circle idea.

The results disclose that the current surge of local interest in quality circles is in fact partly a continuity of the circle trend in the United States. Even if the HKPC or Dr. K.K. Tse did not promote the concept

Table XII: Reasons for Introducing
Quality Circle Programs

No. of Companies & Percentage (%)		Reasons
6	(43%)	are attracted by the idea and wish to try something new
5	(36%)	are suggested by their U.S. headquarters to run the program
2	(14%)	want to improve poor quality
1	(7%)	want to improve internal communication

Table XIII: Sources from Which the Practising
Companies learned the Circle Idea

No. of Companies & Percentage (%)		Sources
6	(43%)	their U.S. headquarters
4	(29%)	Japanese suppliers/customers
2	(14%)	local conference and study mission
1	(7%)	Conference in Malaysia
1	(7%)	inhouse talk by a guest speaker

last year, there might still be several companies implementing quality circles. There is at least one company which started the program in late 1980. Of course, local promotion in the past year did help to strengthen the confidence of these informed companies. Other than the U.S. influence, there are also some companies implementing quality circles because of the suggestion and assistance of their Japanese trading partners.

These findings help to explain why over 60 percent of the first companies in Hong Kong which have circle programs are engaged in the electrical and electronics

industries. On one hand, many electrical and electronics manufacturers in the United States have implemented quality circles for the past two years. When they are convinced of the effects of the programs, they tend to suggest their Hong Kong affiliates to try as well. On the other, companies of these two industries normally have frequent contacts with the Japanese, so they have better chance to encounter the concept of quality circles.

(2) What do They Expect?

These companies usually hope that quality circles can help to improve productivity and quality, facilitate internal communication, build up a sense of belonging and cohesiveness among workers, reduce turnover, and motivate workers to voice their ideas and to develop themselves. This is roughly similar to what they think a circle can do. However, there are two companies which strongly expect that the circle programs can help them solve their quality problems.

(3) Who Initiates the Project?

The persons who initiated the circle programs in these practising companies are shown in Table XIV.

Table XIV: Initiators of Circle Programs
in Practising Companies

No. of Companies & %		Initiators
5	(36%)	U.S. headquarters
5	(36%)	managing directors/general managers
3	(21%)	coefforts of directors & managers
1	(7%)	a few managers

According to these results, it seems that only in four cases do the initiators have a need to persuade their top management, i.e. directors to accept and support the idea. However, in all these cases, before the initiators started to lobby the idea, they already have the strong support of one or two directors, or their overseas affiliated companies already have similar programs.

(4) How do They Sell the Idea?

According to the practices of the companies, four different ways of introducing the quality circle concept to the employees can be identified. (See Table XV)

Table XV: Ways of Introducing the Circle Concept to the Company Staff

<u>No. of Companies & Percentage (%)</u>	<u>Ways of Introduction</u>
8 (57%)	company-wide presentation
3 (22%)	introducing the concept to potential members of pilot circles only
2 (14%)	introducing the concept to supervisory and management staff only
1 (7%)	notice inviting volunteers

The most popular practice is company-wide presentation. That is, everyone in the company will be exposed to the circle concept. Usually, as a first step, a senior manager or the facilitator will meet with middle level managers, supervisors, foremen and technical staff and give them a detailed introduction on quality circles. He will also request the people to volunteer as circle leaders or to join further training. After he had obtained the

volunteers or in some cases after the volunteers are trained up, he will then present the idea in a simpler way to all operators by means of talks, slide shows, posters or newsletters. The logic is that we should let everybody know and be concerned with what is happening in the workshop, even though they may not be interested in joining circle activities now. Of course, in actual operations there are a lot of variations according to the set-up and resources of each company. However, this is the way normally recommended by the Japanese for promoting quality circles.

However, there are also companies which do not want to or have no confidence in starting up a large circle program at once. So they tend to select one or two sections in the company and give presentations only to the staff of these sections with the intention that some pilot circles may start there.

Another method which is in fact quite similar to the above is to introduce the circle concept only to foremen, technician or section managers. In fact, the companies intend to form circles only among these people due to a lack of confidence in the ability or motivation of bottom-line workers.

Finally we notice one company which solicited volunteers for the circle program just by posting a notice at the notice board. It did attract nine employees to join the training course. However, we suspect that the reason why the company can use such method to attract circle members is that it already has a similar program running in the plant.

(5) Do They Keep the Participation Voluntary?

For the companies which have already started circle programs or which are still at the training stage, we find that the modes of members' participation are different as shown in Table XVI.

Table XVI: Modes of Members' Participation
in Circle Activities

A. Companies which are running circles:

<u>No. of Companies & Percentage (%)</u>		<u>Modes of Participation</u>
2	(25%)	voluntary
4	(50%)	semi-voluntary
2	(25%)	compulsory

B. Companies which will run circles:

<u>No. of Companies & Percentage (%)</u>		<u>Modes of Participation</u>
2	(33%)	voluntary
1	(17%)	compulsory
3	(50%)	undecided

Here we have to elaborate on the practical meaning of the above terms. By voluntary participation, it is meant that the employees can exercise their free will to decide whether to participate in circle activities or not. Although they may receive some persuasion, they will never be pressed to join. But under compulsory participation, the employees have no choice, although they may receive explanations as to why they have to join. However in most cases, the managers feel that in the social environment of Hong Kong they cannot trust the people's

voluntary will, though they are also unwilling to order their subordinates to join circle activities. As a result, they tend to use a semi-voluntary approach. Usually the facilitator will first discuss with the workers about problems in their work and let them feel the pressure or the need to put things right. Then he will suggest that they consider quality circles as a tool for solving the problem. Or as in some companies, the facilitators just lead the workers to participate in group discussions like a circle without letting them know at the beginning. In all cases, the company will show the top management's strong favour for their participation and will exercise intensive persuasion which makes workers feel that it is difficult to reject the request for participation.

(6) What Training Do They Provide?

All companies provide some form of training to the facilitators, group leaders as well as the circle members.

Training for facilitators and circle leaders is usually more intensive. It covers the basic quality control techniques, brainstorming, conduct of meetings, motivation and group dynamics. Some may even include a discussion of the objectives, operation and policies of the company.

The facilitators obtain training mainly from self-study or by attending seminars, the conference and the study mission. Only one company has sent its facilitator to attend an intensive training program provided by its U.S. headquarters.

As for circle leaders, in most cases the training are provided in-house by facilitators with the help of other managers. The format varies from a few informal meetings to a well-designed full-day session. There are also two companies which make use of the QCC Leader Training Course conducted by the HKPC. Among all cases, there is only one company which has invited a consultant to set up the program and to provide training for its staff.

For circle members, formal training is less common. Most companies incorporate training into the problem-solving process during circle meetings.

There is a special feature to be noted. In Hong Kong, most companies rely heavily on facilitators to train up both circle leaders and members. In Japan, however, it is usually the foreman or circle leader who is responsible for the training of his members. The purpose is that through such training the leader can develop and strengthen his own leadership.

Some companies which provide in-house training mentioned that they have the intention to send a few leaders to attend external courses and seminars so that they can broaden their views and be aware that they are not working alone.

(7) How Do They Implement the Circle Program?

- Scope of the Circle Program:

Most companies start small with a few pilot circles set up at the beginning, but there are exceptions. Table XVII shows the details. It also shows the number of circles in action in these companies.

Table XVII: Scope of Circle Programs

A. Scale of the Circle Programs:

<u>No. of Companies & Percentage (%)</u>		<u>Scale</u>
7	(50%)	pilot circles in some divisions
2	(14%)	pilot circles among the supervisory staff
4	(29%)	no. of circles depending on number of volunteers
1	(7%)	compulsorily implemented among all production workers

B. No. of circles in the Companies (covers only those practising companies):

<u>No. of Companies & Percentage (%)</u>		<u>No. of Circles</u>
1	(13%)	2 circles
3	(37%)	4 circles
4	(50%)	6 - 8 circles

- Circle Members:

The number of members in a circle varies a lot, ranging from four to twelve. As for the educational level of circle members, the majority are of primary or junior secondary. There are also some who have finished secondary education or have received technical training. But the circle members of one company are all forty to fifty year-old women who have not received much formal education or are even illiterate.

- Circle Meetings:

All the circles meet once a week. The duration of the meeting ranges from half an hour to one hour. Usually the time for circle meetings is fixed before hand, but in

many companies the meeting will occasionally be re-scheduled or cancelled due to rushes in production run.

Four companies have their circle meetings during office hours, two during lunch and two after work. For these four companies which schedule circle meetings outside working hours, three give normal overtime pay and one provides free lunch and soft drinks.

- Circle Leaders:

Normally the circle members have their foremen or supervisors as the leaders. But in one case, a technician is appointed as the leader of a group of operators. In another company, their circles have two leaders - one group leader and one theme leader. The theme leader changes when a project is finished while the group leader usually remains unchanged.

- Facilitators:

According to the companies, the major responsibility of a facilitator is to train circle leaders and members, coordinate and facilitate circle operations, maintain records, promote circle activities and to interface between circles and other organizations. In many cases, the facilitator will hold meetings with the circle leaders at a fixed time or before a circle meeting to discuss the problems and progress of the circle, matters to be brought up, or methods applicable for problem analysis. Usually the facilitator will join every circle meeting when it is still at an infant stage, but he tends to reduce the frequency of attendance when the circle becomes more mature.

Many companies agree that the performance of the facilitator will have a big effect on the success or failure of their circle programs. However, among the companies, only five have appointed full time facilitators. For the others, usually the managers who suggested running the circle program act as facilitators. In some cases, they train up their subordinates to take over the post.

- The Management of Circle Programs:

While facilitators have a responsibility to overlook the circle program, we find that in fact there are only four cases where the facilitators man the whole program and report direct to the general managers or the steering committee. In four companies, the quality circle program is under the auspices of production managers, two under quality control managers, three under personnel and training managers and one under the controller. Among these practising companies, there are eight which have set up steering committees to formulate the objectives and action program for circle activities, provide guidance to facilitators, solve problems encountered, consider circle suggestions and ensure management support. Many companies formed the steering committee according to the advice of books and manuals. Only one company said it feels the need for such a committee. For other companies which do not have a steering committee, the explanation is that it is not yet the right time because they are still at a training stage or just running a few pilot circles.

(8) Do They Make Any Changes before The Program?

Only one company mentioned that it has reviewed

the pay of the whole company before it introduced the circle program. No other company indicated that it has made any changes in the organization to facilitate the acceptance of quality circles.

However, we note one company, before launching the circle activities, first introduced a technical circle program which required compulsory participation of all its workshop staff. This program in fact is modelled after quality circles. Each technical circle has seven to eight members grouped according to their respective division. Each week they hold a meeting discussing quality problems identified by the quality control engineers, the plant manager or the managing director. The supervisors are the leaders of such group meetings. After this company had started up the technical circle program, it then moved on to promote a quality circle program which is still at a training stage up to April 1982. The reason put forward by the company for such a special move is that it urgently wants to improve its product quality. It is aware of the long lead-time required for the training and preparation of a normal circle program. Since it cannot wait, it changed the circle format slightly and introduced something called technical circles. The results of such activities so far are quite satisfactory. Nevertheless, the company is still interested in the voluntary nature of quality circles. So it has tried to introduce a real circle program with the hope that it will replace the technical circles in the long run.

(9) What is the Workers' Response?

So far no company has complained of workers' rejection of the circle program, though they find that the younger and more aggressive workers are usually more receptive to the idea and tend to volunteer for the program.

In this study we have also interviewed some circle members and find the response varies from one circle to the another, sometimes depending on how the circle is formed and run, and sometimes related to the age, educational level and personality of the members. For instance, in one circle the members are quite happy with the activity and feel that it adds variety to their work. In another one where the participation is compulsory, it is treated as a venue for airing problems. For one circle which has run for nearly a year, the older members can feel some achievements while the newer ones tend to be indifferent. In addition, we feel that circle leaders are generally more enthusiastic than circle members.

(10) Do They Have any Achievement so far?

According to the companies' experience, most circles, for the first few months, tend to be concerned more with improving their working condition, but after these problems have been solved and their confidence built up, they will start to work on production problems. There are successful cases in reducing scrap rate and improving packing methods, but no saving in cost has been measured so far. Some companies also reported that even before the

by the volunteers during training sessions.

As for intangible results, many companies said that their workers are now more quality conscious and have better morale, communication is much improved, and some are even surprised at the potential and performance of their circle leaders.

No company thought that their circle programs have led to any significant adverse effect on their workers so far.

(11) What Kind of Problems do They Face?

According to the companies' opinion as well as our observations, we have identified a number of problems which are faced by some or all circle programs:

i) The circle members usually do not like holding circle meetings after working hours or during lunch time, even with overtime pay. But for those meetings held in office hours, they occasionally have to be rescheduled or even cancelled due to rushes in production runs. We noticed that there are a few companies which have their circle activities stopped for one or two months just because of production pressure.

ii) Nearly all companies meet the circle program with skepticism or objections from their managers or directors. For instance, in one company the production manager objected to the idea for fear that his production schedule would be affected. A plant manager of another company even holds a negative attitude but is forced to let the circle run in his workshop because it is his supervisor's program.

iii) Many circle promoters find that their middle and top managers usually do not know much about quality control and quality circles, but they tend to think that they know a lot. While some managers do support the circle program, they are not prepared to, or are aware of the need to alter their management style to be more participative and open-minded. There are worries among the promoters, supervisors and even circle leaders that the so-called management support may turn out to be lip service only.

iv) Some companies implement the circle program only among their supervisory or technical staff rather than bottom-line workers, because they have no confidence in the ability and motivation of the latter. These programs are also compulsory for the staff. It is possible that such programs will just be another name for a staff meeting.

v) For some circles, the workers' educational level is relatively low. It is evident that they do have difficulties in learning quality control techniques and analysing problems systematically. It also requires a lot of efforts to motivate them to think and speak up.

vi) Some circles tend to rely too much on the facilitator by making him responsible for training members, writing minutes, conducting meetings and even deciding matters to be discussed in the meeting.

vii) There are general difficulties in finding adequate personnel to act as circle leaders. A company commented that its leaders are weak in leadership even

after training. Another company found its supervisor unable to chair the meeting and had to look for other workers to act as leaders.

viii) There are insufficient training materials and visual aids available in Hong Kong. Materials in Chinese are even scarcer. Many facilitators have to make a lot of efforts to collect and translate information for the reference of their members.

ix) There are also a host of minor problems, e.g., some members are too shy to speak up, some circles spend too much time on arguing a problem, some members are reluctant to come to meetings with the excuse of being too busy or too tired, workers do not have confidence that management will consider their suggestions, etc..

Summarizing all the above findings, we can say that circle programs in Hong Kong are still at a stage of infancy. The predominant concern of the practising companies is whether the program can be accepted by their workers as well as managers. The second question is whether the program can take root and achieve the alleged functions. Obviously it is too early for us to consider the latter question.

Training and Promotion

Lastly in this research, we try to solicit our respondents' opinion on the adequacy of the training and promotional facilities on quality circles in Hong Kong.

Regarding the training problem, all but one commented that the existing training facilities are clearly insufficient, especially circle leader training. However,

there are five respondents who pointed out that there is in fact a serious lack of experts on quality circles in Hong Kong. Those who are offering courses in this field are not really familiar with the concept and the actual operation.

As for the promotion of the circle concept, 62 percent of the respondents thought that it is insufficient and much more promotional effort is required. One-third thought that the initial promotion in the past year is very good already but more promotion in the future is also needed. Only two respondents said that it is not yet time to spread the idea too widely.

Some respondents suggested that the HKPC and the HKMA should play an active role in promoting the circle concept as well as providing more training courses and experience sharing seminars. A few also expected the Hong Kong Association of Quality Circles and other industrial associations to play an important part.

CHAPTER V

THE PROSPECT OF

THE CIRCLE MOVEMENT IN HONG KONG

In the process of our literature review, we found that nearly all articles and studies on quality circles have given impressive reports about circle achievements in both Japan and other overseas countries. These achievements include tangible improvements in quality and productivity as well as intangible benefits such as enhancement of employees' job satisfaction, morale and communication. At the same time, overseas practitioners have found it possible to justify and explain the success of quality circles by means of existing theories of psychology and behavioral science. This strongly suggests that quality circles are not myths of Japanese management, but concrete ideas that should be applicable in other social and cultural environments.

Based on the above, it seems to be logical to expect that the concept of quality circles would be very attractive to many enlightened managers. Our research also found that most of the informed managers believed in the functions of quality circles and quite a few have shown interest in them. However, being interested is one thing; whether the managers have the confidence and ability to implement quality circles in their companies is quite another. In reality, this will be affected by a number of internal and external factors.

To facilitate discussions, we have grouped the major factors into four categories: the introduction and promotion of the circle idea; the perception and beliefs of the managers; the environment for circle activities; and operational problems of circle programs. An examination of these four aspects may shed light on our basic question: "Will the quality circle movement develop in Hong Kong?"

The Introduction and Promotion of Quality Circles

Up to now, there are only a few people who have heard of the concept of quality circles. Promotional activities in this aspect are infrequent. Therefore, we lack a forum where people can exchange experience and opinion. Neither can we create an atmosphere to stimulate people to think and talk about quality circles. Consequently, some people tend to lose interest in the idea very quickly or even forget it.

One of the difficulties in introducing the concept of quality circles is that it is not a straight forward idea such as the zero defect program or management by objectives. It has a number of delicate points which cannot be fully appreciated with a short explanation. Therefore, the perception of quality circles gained by a person will depend very much on the knowledge, presentation skill, emphasis, and credibility of the promoter. At present, most people learn of the idea by reading journal articles or hearing about circles at some meetings or from their friends and colleagues. Since the objective of most activities on quality circles, e.g., conferences, seminars or journal reports, is to sell the idea to management, they

tend to place too much emphasis on its functions. This makes quality circles sound like a panacea. Such bias creates either unrealistic expectations or skepticism among participants. In addition, most of these promotional activities consist of presentations from different speakers. While they have succeeded in arousing the interest of participants, they usually cannot provide a clearcut, systematic and complete view of quality circles.

Of course, we expect that people who become interested will take the initiative to learn more about the idea by themselves. However, only very limited suitable material is available in Hong Kong. It is a very discouraging situation. We have received complaints from facilitators, group leaders and other interested people that they cannot find adequate materials to read. Most of them have to order books and journals from other countries such as Japan, the United States or Taiwan. This is both time consuming and expensive. In fact, a lot of people just do not know where to buy. In addition, even though some reference books can be found, their content may not suit the local environment and they are usually too long for casual reading. An enthusiast said that he was always embarrassed when his friends, after his introduction of the circle idea, asked for some precise introductory materials for reference. We can be sure that such a serious lack of reading materials on quality circles is detrimental to the further development of the circle movement in Hong Kong.

Furthermore, we notice that local promotional activities tend to be directed mainly at the middle manage-

ment as personnel, production or quality control managers. Very few of them are aimed at top management such as managing directors and general managers. However, to implement quality circles requires the understanding and support of various departments and sometimes even changes in the organizational climate and management style. In other words, quality circles cannot work without top management consent. More often, the upper management is the impetus. Among the practising companies we have interviewed, only one had its program promoted on the sole initiative of its middle level managers. All others had the blessing of, or instruction initiated by their top management. There is also a case in which the circle program cannot go through despite the enthusiastic support of a number of middle managers just because the general manager is not convinced. In fact, most middle-level managers will not take the trouble or initiative to persuade their top managers to consider the circle idea, unless they know that those top people are also interested. This is best demonstrated by the response of our comparison group. Of those people who had an interest in the circle idea, all said that they were not in a position to promote it in their companies. But they are all middle-level managers. In short, if we want to sustain the circle movement, we must widely promote the circle idea among top management.

The Perception and Attitude of the Informed Managers

The quality circle, in essence, is a human approach to problem solving. Its fundamental building block is participation and self-development of the workers. The

basic philosophy is people-building, that is, we must first make an investment in the workers, then all tangible and intangible results will follow.

What do our respondents think? They generally believe that the quality circle is a management tool which can enhance morale, facilitate communication and improve quality and productivity. Such a perception is not wrong. However, less than one-tenth of the people have ever thought that the circle program can help to develop the potential of workers. Clearly something is missing here. These people are concerned with what circles can achieve for their companies, rather than for their workers. Such an attitude leads to two problems. Firstly, they do not really believe in the potential of workers. A manager said, "I don't think the workers can solve any big problems for me. However, so long as they can get satisfaction from handling small troubles, the program is good." This leads to the second problem, that is, the managers have no intention of delegating part of their decision-making power to the workers. Some managers do treat the quality circle as another form of participative management or a personnel program to nurture motivation among workers. However, we know that the quality circle is something more than a usual form of participative management. It not only provides an opportunity for workers to put forth their views, but aims at training up workers so that they can take the initiative in decision-making. Of course, the ideal form of quality circle is somewhat high sounding. However, we do not know what the effect of quality circles will be if the people-building philosophy is not respected. What we do know is

that if people treat the quality circle just as a tool to improve communication and motivation, it will sooner or later look like a staff meeting or a joint consultation committee. In fact, this is what a few practising companies are doing.

In addition, we must realize that while most people have ideas about the functions of the quality circle, they are still skeptical about its real power. There are three reasons for such an attitude. Firstly, most promotional activities and articles tend to boost the functions of quality circles but skip cases of failure. Secondly, people have trouble in forming a concrete idea about how a circle actually works. A supervisor, after attending an introductory session on quality circles and reading through some case reports, said, "I understand very well what a circle can do for me and the techniques I have to use, but I still cannot appreciate how the workers get together and discuss problems." Reasons for such phenomena are their lack of group meeting experience as well as the fact that they have never attended a real circle meeting. Thirdly, some people are overwhelmed by the myths of Japanese culture and are suspicious that the reported achievements of quality circles are largely attributed to the special social and cultural factors of Japan.

The skeptical attitude is strong among production supervisors. When they are asked to be a part of the circle activity, most say yes. However, discussions with some of these supervisors revealed that they are reacting as subordinates to a reasonable request of their superiors.

Often they do not fully agree with the concept or understand their roles in circles. There are also worries among them that the top management will treat the circle program as a fad and lose interest after a few months or years.

In fact, skepticism also exists among middle and upper managers. As can be seen from our study, there is a strong "wait-and-see" attitude. A lot of managers hesitate to implement quality circles at the moment but want to wait until there are some successful examples to follow. While such an attitude is natural, it creates a pressure for those practising companies. Some circle programs face the risk of over-exposure. A circle leader of a well-known company complained, "Sometimes we just don't want to hold the circle meeting because there are too many visitors. It seems that we are giving shows to them rather than solving our own problems." This public interest makes some companies hide away their circle programs. However, this may deprive them of the chance of mutual exchange and experience sharing.

The Environment for Circle Activities

The prospect of circle activities in Hong Kong is affected by various factors in our general economic, social and cultural environment as well as the particular environment of the company.

Firstly we have to know whether Hong Kong needs to try some new management techniques such as quality circles. For the past couple of decades, our industry has enjoyed remarkable growth. The pre-occupation of managers at that time was to get as many goods out for shipment as possible.

But the situation changed recently. The manufacturers are facing sharpening competition in the market, restive protectionism and escalating production costs. They have now become more sensitive to the problem of quality and productivity.

At the same time, there is a trend of growing professionalization of management in Hong Kong. These professional managers usually are more concerned with improvement in organizational efficiency, in addition to production and sales. As a result, problems of communication, employee turnover, workers' sense of belonging, motivation at work, employer-employee relations and workers' training are high on the agenda for many companies.

These are favourable conditions for the promotion and development of quality circles. However, it should be noted that while some managers are concerned with the problems of communication and motivation, they may not place a high priority on them. Some of our respondents said that they were too busy to consider the circle program at the moment. Anyhow, quality circles are something that is good to have, not a necessity. Some people also prefer to use other methods to solve their problems, for instance, better equipment for improving quality and productivity, or more attractive compensation and welfare schemes to enhance workers' motivation.

According to overseas experience, quality circles are best started during a period of relative economic stability and when the turnover of workers is low. Resistance to change by workers and supervisors will also be lower

when the general employment situation is not good. At present, our trade and industry are facing a mild economic recession. The turnover of our workers is generally at a low level. If the top management is willing to make the investment, it should be a good time to try the circle idea.

However, factors of the social and cultural environment are less favourable to circle activities. Our respondents have highlighted some major ones. For instance, Hong Kong people take a short-sighted view of business; workers are too money-oriented and less concerned with job satisfaction; Chinese people lack group spirit; local people are shy to speak up; government does not support quality circles, etc.. In fact, many managers are scared by these obstacles and have decided to shelve the circle idea. The point is that while these factors tend to hinder the acceptance and development of quality circles, they exist as a barrier to most management reforms, not just to quality circles.

Probably the major deterrent in people's minds for circle activities is the lack of motivation and initiative on the part of workers. Some people maintained that Japan has a history of mutual worklife responsibility between workers and the company. It also has a climate where many workers are eager to help achieve the revolution on quality. This is not the case in Hong Kong. In our opinion, to some companies this is a real problem, especially those which have a hostile employer-employee relations, harsh compensation schemes, or poor job security. However, for most

companies this is a chicken and egg question.

There is one thing which has not gained much attention from our respondents, that is, the importance of a total concept of quality control within a company. The Japanese stress that quality circles should be an integral part of the company-wide quality control system. However, quality knowledge and awareness of both managers and workers are generally weak in Hong Kong. Therefore, our circle activities are usually an independent program without the support of a sound quality control system. On the other hand, such a program may be hard to maintain. On the other hand, however, we may use the program to arouse quality consciousness among workers or even managers, and to make use of workers' contact with daily work to pinpoint quality problems. This is what actually happens in one of our researched companies. Nevertheless, quality circles can never replace the role of quality control and quality assurance. Neither should they be a lazy way out for the management to discharge its quality responsibility.

Operational Problems of Circle Programs

The form and process of local circle activities basically follow that of the Japanese and the United States models, though there are sometimes modifications to fit the situation of individual company. In fact, a number of respondents commented that we should not copy the Japanese model entirely, even though they generally have no idea about what aspects we have to modify.

Reviewing the local experience, we find that the main controversial aspect is the principle of voluntary

participation. The Japanese stress all the time that the voluntary participation of workers is the prerequisite for the success of a circle program. However, local companies usually have no confidence in the voluntary will of workers. In addition, the Japanese definition of the word "voluntary" is quite ambiguous. Together with voluntary participation, they also say that management must stimulate, persuade and encourage the workers to join the circle activities. As a result, we see local companies implementing the circle program with both compulsory and voluntary approaches, but many fall somewhere in between. If we adhere to the Japanese rules, some circle programs are bound to fail. However, we do not have the evidence for conclusion at the moment. In fact, some companies do expect their circle programs to acquire the voluntary nature when their workers and supervisors begin to feel the interest and benefits of participation. Of course, the basic query is whether those members can develop the necessary interest in a compulsory program.

Another problem shown by local experience is that some companies are falling into the usual trap of by-passing the middle level management and supervisors. They are not giving sufficient orientation to middle managers. In cases where the circle programs meet with the objection of these managers or first-line supervisors, the companies either force them to accept or just select another senior workers or supervisors to act as circle leaders. Circles formed under such situation, however, usually have a lot of problems and less satisfactory performance. In fact, some

companies have a history of a relatively autocratic line management. Circles require a basic change in management style, from autocratic to participative. The problem is that some supervisors felt that they were coerced to have circles even though they volunteered. One person suggested in jest that quality circle is a theory X approach used to install a theory Y concept.

There are companies which implement circle programs just for their supervisory and middle management staff. This is a deviation from the basic spirit of quality circles - to extend participation in decision-making to the bottom-line workers. This will also lead us to a tendency to call any group meeting a circle, e.g., management circle, which is not true.

One thing which makes our circle program quite similar to that of the American companies is our heavy reliance on the facilitator to promote and coordinate the circle activities. In fact, for a healthy program, coordination of circles should be the responsibility of the line organization whose workers are circle members. Otherwise, there is a danger of creating two lines of authority. For the problem of training, we note that in our cases, nearly all training for circle members is conducted by the facilitator. However, if the circle leader is a supervisor, he should do the training in order to support and enhance his leadership. But this is neglected by most companies.

Talking about training, we also note that there is a serious lack of training materials including visual aids and reference materials, especially in Chinese. As a

result, the facilitators or the trainers usually have to develop the whole program by themselves. This not only requires a lot of effort but also affects the quality of their training programs.

Another related program is that a few companies tend to ignore training for their circle members. The excuse is that the workers' educational level is too low to learn the techniques, or they do not want to bore the members with the teaching of quality control techniques and other theories. It seems that these programs are also deviating from the spirit of quality circles and have the danger of becoming just gripe sessions or social gatherings. In one or two cases, we find that the circle members are just endorsing the decision of the circle leaders and facilitators.

The last question is whether the circle program should start small. It is generally recommended that a company should start with two or three pilot circles so that they can test the policies and operational details of running circles and at the same time demonstrate that circles work. However, we have cases where there are more volunteers than expected and the companies do not want to turn them away for fear of diminishing their interest and enthusiasm. There is also a company which has implemented circles all over the company compulsorily. In the latter case, we did find some administrative and control problems.

Conclusion

Based on the above research and discussion, we shall make a summary of the circle activities in Hong Kong

in the following. We shall also try to project what will happen to our circle movement in the coming few years.

In general, the quality circle should be an attractive idea for some local managers. The prevailing economic situation has also stimulated a need for trying some novel management techniques. However, quality circles work on certain beliefs of human beings which are not widely held by local managerial and supervisory staff. In addition, some of our environmental factors are not favourable to an effective operation of the circle program. As a result, if a company wishes to implement quality circles, it must overcome many difficulties and may have to effect certain changes in its organizational structure, management style, decision-making process or personnel policies. This has scared away some of the interested persons and left others in a "wait-and-see" posture. Only a few have the courage to carry out the program.

For those practising companies, since guidelines for circle activities are usually very broad and can be subjected to different interpretations, they are still having a hard time in searching for an adequate method which will suit the company climate as well as the larger social and cultural environment. However, according to their present practices, there is a high possibility that some programs will fall through or end up in sheer formalities.

In addition, there are insufficient reference materials, training facilities and promotional activities at the moment. This has hindered a better understanding and acceptance of the circle idea among local people.

Looking forward to the future of the circle movement, we expect that there will be some twenty to thirty companies which may implement some form of circle programs in the coming year. Further development will depend on: firstly, whether there will be successful examples from local companies in the near future; and secondly, whether there will be some organizations coordinating and strengthening the efforts in promoting the idea, securing reference materials and providing training and experience sharing activities. However, Hong Kong people are fast to forget new ideas. If we cannot provide a strong and sustaining stimulus in the coming two or three years, the circle movement will cool down very soon. Of course, there may still be some companies running their circles, but they will no longer attract much attention from the public.

In short, quality circles have a good chance of development in Hong Kong. However, they also have equal difficulties to overcome. At this preliminary stage, it is very hard to say whether our circle movement will flourish or not. However, we do not think we should hold an over-optimistic view of the prospect of the circle activities.

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